

## **REMARKS**

Claims 16, 18, 19, 32, 33, 35-40 and 42-49 stand rejected under 35 U.S.C. §103(a) as obvious over Stirnimann et al. U.S. 6,589,641, in view of Burguette et al. U.S. Patent No. 4,705,699, and in view of Nohr et al. U.S. Patent No. 5,747,550.

Independent claims 16, 33 and 38 have been amended to include the feature of “a source of said far-ultraviolet radiation being disposed with a separation distance of about 5nm from said disk surface.” Applicants traverse the rejections of independent claims 16, 33 and 38 because the cited references do not disclose or suggest this feature. The use of the far-ultraviolet radiation at a separation distance of about 5nm from the disk is disclosed in the specification on page 36, line 9.

In the present invention, a Xe<sub>2</sub> excimer lamp is used to photocrosslink the lubricating layer, and specifically, as seen in Figures 16A-16C, a barrier discharge lamp is used since it has a large emission surface area and uniform radiation emission. The variation of radiation from the lamp is within 15%, as disclosed on page 36, line 14. However, use of an ultraviolet source results in increased absorption of the optical radiation by the oxygen. To avoid the problem of absorption of the optical energy, the ultraviolet source is located near the magnetic disk. In the present invention, the ultraviolet source is preferably located a distance of 7nm or less from the magnetic disk, and more preferably, is located about 5nm from the magnetic disk. By applying the far-ultraviolet radiation at a separation distance of about 5nm from the disk, the cross-linking of the lubrication film occurs within a short period of time.

Stirnimann et al. merely teach the use of ultraviolet radiation, however there is no teaching of where the ultraviolet source is in relation to the magnetic disk surface. Since there is no teaching or suggestion of locating the far-ultraviolet source at a separation distance of about 5nm, Applicants submit the rejections of claims 16, 33 and 38 are traversed.

The Burgette et al. reference is cited for teaching that photopolymerization of coatings should take place in an oxygen free environment. However, Burgette et al. do not disclose or suggest the features of the present invention, specifically, using far-ultraviolet radiation at a separation distance of about 5nm, as in the amended independent claims.

Nohr et al. is cited for teaching the use of a wavelength specific sensitizer associated with a reactive species generating photoinitiator and the use of excimer lamps to produce narrow wavelength radiation tuned to the photoinitiator species. However, Nohr et al. do not disclose or suggest the features of the present invention, specifically, using far-ultraviolet radiation at a separation distance of about 5nm, as in the amended independent claims.

For the foregoing reasons, Applicants believe that this case is in condition for allowance, which is respectfully requested. The examiner should call applicants' attorney if an interview would expedite prosecution.

Respectfully submitted,

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